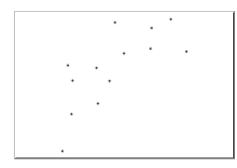
CRUMP 2003 Selected Water Sample Results



Data format: Shapefile

File or table name: CRUMP_Samples

Coordinate system: Geographic

Theme keywords: CRUMP, Water Sample Results, Gross Alpha, Gross Beta, Radium-226, Radium-228, Total Uranium, Uranium

mass

Abstract: Point locations and water sampling results performed in 2003 by the Church Rock Uranium Monitoring Project (CRUMP) a consortium of organizations (Navajo Nation Environmental Protection Agency, US Environmental Protection Agency, New Mexico Scientific Laboratory Division, Navajo Tribal Utility Authority and NM Water Quality Control Commission). Samples include general description of the wells sampled, general chemistry, heavy metals and aestheic parameters, and selected radionuclides. Here only six sampling results are presented in this point shapefile, including: Gross Alpha (U-Nat Ref.) (pCi/L), Gross Beta (Sr/Y-90 Ref.) (pCi/L), Radium-226 (pCi/L), Radium-228 (pCi/L), Total Uranium (pCi/L), and Uranium mass (ug/L). The CRUMP samples were collected in the area of Churchrock, NM in the Eastern AUM Region of the Navajo Nation.

FGDC and ESRI Metadata:

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Entity and Attribute Information
- Distribution Information
- Metadata Reference Information
- Binary Enclosures

Metadata elements shown with blue text are defined in the Federal Geographic Data Committee's (FGDC) <u>Content Standard for Digital Geospatial Metadata (CSDGM)</u>. Elements shown with green text are defined in the <u>ESRI Profile of the CSDGM</u>. Elements shown with a green asterisk (*) will be automatically updated by ArcCatalog. ArcCatalog adds hints indicating which FGDC elements are mandatory; these are shown with gray text.

Identification Information:

Citation:

Citation information:

Originators: Church Rock Uranium Monitoring Project (CRUMP)

Title:

CRUMP 2003 Selected Water Sample Results

*File or table name: CRUMP_Samples

Publication date: 2003

*Geospatial data presentation form: vector digital data

Other citation details:

CRUMP is a consortium of organizations (Navajo Nation Environmental Protection Agency, US Environmental Protection Agency, New Mexico Scientific Laboratory Division, Navajo Tribal Utility Authority and NM Water Quality Control Commission)

*Online linkage:

\\Terra_dc\Navajo\NAUM_NN_Summary\DB\Sampling\CRUMP_Samples.shp

Description:

Abstract:

Point locations and water sampling results performed in 2003 by the Church Rock Uranium Monitoring Project (CRUMP) a consortium of organizations (Navajo Nation Environmental Protection Agency, US Environmental Protection Agency, New Mexico Scientific Laboratory Division, Navajo Tribal Utility Authority and NM Water Quality Control Commission). Samples include general description of the wells sampled, general chemistry, heavy metals and aestheic parameters, and selected radionuclides. Here only six sampling results are presented in this point shapefile, including: Gross Alpha (U-Nat Ref.) (pCi/L), Gross Beta (Sr/Y-90 Ref.) (pCi/L), Radium-226 (pCi/L), Radium-228 (pCi/L), Total Uranium (pCi/L), and Uranium mass (ug/L). The CRUMP samples were collected in the area of Churchrock, NM in the Eastern AUM Region of the Navajo Nation.

Purpose:

This dataset was developed to support the U.S. Environmental Protection Agency (USEPA) in its undertaking of an extensive scientific study to determine if abandoned uranium mines (AUM) and related mine features pose a significant risk to human health and the environment, and to identify areas requiring action to reduce risk for the Navajo Nation.

*Language of dataset: en

Time period of content:

Time period information:

Range of dates/times:

Beginning date: August 5, 2003 **Ending date:** October 29, 2003

Currentness reference:

ground condition

Status:

Progress: Complete

Maintenance and update frequency: None planned

Spatial domain:

Bounding coordinates:

*West bounding coordinate: -108.653450 *East bounding coordinate: -108.453250 *North bounding coordinate: 35.671283 *South bounding coordinate: 35.459333

Local bounding coordinates:

*Left bounding coordinate: -108.653450 *Right bounding coordinate: -108.453250 *Top bounding coordinate: 35.671283
*Bottom bounding coordinate: 35.459333

Keywords:

Theme:

Theme keywords: CRUMP, Water Sample Results, Gross Alpha, Gross Beta, Radium-226, Radium-228, Total Uranium, Uranium mass

Theme keyword thesaurus: None

Place:

Place keywords: Church Rock, Eastern AUM Region, Navajo Nation, McKinley County,

New Mexico, United States

Place keyword thesaurus: None

Temporal:

Temporal keywords: 2003

Access constraints: None.

Use constraints:

The CRUMP samples were collected in the area of Churchrock, NM in the Eastern AUM Region of the Navajo Nation. The following: Gr. Alpha (U-Nat Ref.) (pCi/L), Gr. Beta (Sr/Y-90 Ref.) (pCi/L), Radium-226 (pCi/L), Radium-228 (pCi/L), Total Uranium (pCi/L), and Uranium mass (ug/L) are a subset of the full 2003 dataset.

A summary of data specific use constraints will be entered here. For example, issues related to completeness, currentness, positional accuracy, thematic accuracy, and methodology.

Use of this data generally requires computer workstations with ESRI's Arc/Info (8.x or above), ArcGIS (8.x or above), or ArcView (3.x), or some other GIS or CAD software that is capable of reading or converting this dataset.

The data are provided "as-is," without warranty of any kind, either express or implied.

These data have been compiled as part of a desktop project to collect existing spatial data to support the study of Navajo abandoned uranium mines. No field verifications were undertaken as part of this desktop study.

Point of contact:

Contact information:

Contact organization primary:

Contact organization: U. S. Environmental Protection Agency, Region 9, Superfund Program

Contact address:

Address type: mailing and physical address

Address:

75 Hawthorne St (SFD 8-2)

City: San Francisco State or province: CA Postal code: 94105 Country: USA

Contact voice telephone: 415-972-3167

Security information:

Security classification system: None

*Native dataset format: Shapefile

*Native data set environment:

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 9.1.0.780

Back to Top

Data Quality Information:

Attribute accuracy:

Attribute accuracy report:

From CRUMP provided MS Excel spreadsheet.

Completeness report:

The CRUMP samples were collected in the area of Churchrock, NM in the Eastern AUM Region of the Navajo Nation. The following: Gr. Alpha (U-Nat Ref.) (pCi/L), Gr. Beta (Sr/Y-90 Ref.) (pCi/L), Radium-226 (pCi/L), Radium-228 (pCi/L), Total Uranium (pCi/L), and Uranium mass (ug/L) are a subset of the full 2003 dataset.

Positional accuracy:

Horizontal positional accuracy:

Horizontal positional accuracy report:

Locational accuracy unknown from data source.

Lineage:

Source information:

Type of source media: MS Excel Spreadsheet

Source citation abbreviation:

CRCWellsWaterQuality2003_S01140501.xls

Source contribution:

Sole source of thisd data.

Process step:

Process description:

Data was selected from CRCWellsWaterQuality2003_S01140501.xls for the following components: Gross Alpha (U-Nat Ref.) (pCi/L), Gross Beta (Sr/Y-90 Ref.) (pCi/L), Radium-226 (pCi/L), Radium-228 (pCi/L), Total Uranium (pCi/L), and Uranium mass (ug/L), and reformated into a DBF file. DBF file was imported too create this shapefile.

Process software and version: ESRI ArcGIS 9.1

Process date: July 2007

Process contact:

Contact information:

Contact organization primary:

Contact organization: TerraSpectra Geomatics

Contact address:

Address type: mailing and physical address

Address:

2700 E Sunset Rd, Ste A-10

City: Las Vegas

State or province: NV

Postal code: 89120 Country: USA

Back to Top

Spatial Data Organization Information:

*Direct spatial reference method: Vector

Point and vector object information:

SDTS terms description:

- *Name: CRUMP_Samples
- *SDTS point and vector object type: Entity point
- *Point and vector object count: 13

ESRI terms description:

- *Name: CRUMP_Samples
- *ESRI feature type: Simple
- *ESRI feature geometry: Point
- *ESRI topology: FALSE
- *ESRI feature count: 13
- *Spatial index: TRUE
- *Linear referencing: FALSE

Back to Top

Spatial Reference Information:

Horizontal coordinate system definition:

Coordinate system name:

*Geographic coordinate system name: GCS_North_American_1983

Geographic:

- *Latitude resolution: 0.000000
- *Longitude resolution: 0.000000
- *Geographic coordinate units: Decimal degrees

Geodetic model:

- *Horizontal datum name: North American Datum of 1983
- *Ellipsoid name: Geodetic Reference System 80
- *Semi-major axis: 6378137.000000
- *Denominator of flattening ratio: 298.257222

Back to Top

Entity and Attribute Information:

Detailed description:

*Name: CRUMP_Samples

Entity type:

*Entity type label: CRUMP_Samples
*Entity type type: Feature Class
*Entity type count: 13

Attribute:

*Attribute label: FID *Attribute alias: FID *Attribute definition:

Internal feature number.

*Attribute definition source:

ESRI

*Attribute type: OID
*Attribute width: 4
*Attribute precision: 0
*Attribute scale: 0

Attribute domain values:

*Unrepresentable domain:

Sequential unique whole numbers that are automatically generated.

Attribute:

*Attribute label: Shape *Attribute alias: Shape *Attribute definition: Feature geometry.

*Attribute definition source:

ESRI

*Attribute type: Geometry
*Attribute width: 0
*Attribute precision: 0
*Attribute scale: 0

Attribute domain values:

*Unrepresentable domain:

Coordinates defining the features.

Attribute:

*Attribute label: WELL_NO *Attribute alias: WELL_NO

*Attribute type: String *Attribute width: 10

Attribute:

*Attribute label: WELL_NAME *Attribute alias: WELL_NAME

*Attribute type: String *Attribute width: 20

Attribute:

*Attribute label: CHAPTER *Attribute alias: CHAPTER

*Attribute type: String *Attribute width: 15

Attribute:

*Attribute label: LAT_DM *Attribute alias: LAT_DM

*Attribute type: String *Attribute width: 12

Attribute:

*Attribute label: LONG_DM *Attribute alias: LONG_DM

*Attribute type: String *Attribute width: 12

Attribute:

*Attribute label: LATITUDE *Attribute alias: LATITUDE

*Attribute type: Number *Attribute width: 19

*Attribute number of decimals: 9

Attribute:

*Attribute label: LONGITUDE *Attribute alias: LONGITUDE

*Attribute type: Number *Attribute width: 19

*Attribute number of decimals: 9

Attribute:

*Attribute label: TRS_COORD *Attribute alias: TRS_COORD

*Attribute type: String *Attribute width: 15

Attribute:

*Attribute label: FORMATION *Attribute alias: FORMATION

*Attribute type: String *Attribute width: 15

Attribute:

*Attribute label: WELL_TYPE *Attribute alias: WELL_TYPE

*Attribute type: String
*Attribute width: 15

Attribute:

*Attribute label: TD_FT

*Attribute alias: TD_FT

*Attribute type: Number *Attribute width: 15

Attribute:

*Attribute label: USES *Attribute alias: USES

*Attribute type: String *Attribute width: 15

Attribute:

*Attribute label: SAMP_DATE *Attribute alias: SAMP_DATE

*Attribute type: Date *Attribute width: 8

Attribute:

*Attribute label: GROSSALPHA
*Attribute alias: GROSSALPHA

*Attribute type: Number *Attribute width: 17

*Attribute number of decimals: 2

Attribute:

*Attribute label: GA_UNITS
*Attribute alias: GA_UNITS

*Attribute type: String *Attribute width: 20

Attribute:

*Attribute label: GROSSBETA *Attribute alias: GROSSBETA

*Attribute type: Number *Attribute width: 17

*Attribute number of decimals: 2

Attribute:

*Attribute label: GB_UNITS *Attribute alias: GB_UNITS

*Attribute type: String *Attribute width: 20

Attribute:

*Attribute label: RADIUM_226
*Attribute alias: RADIUM_226

*Attribute type: Number *Attribute width: 17

*Attribute number of decimals: 2

Attribute:

*Attribute label: RA226_UNIT *Attribute alias: RA226_UNIT

*Attribute type: String *Attribute width: 15

Attribute:

*Attribute label: RADIUM_228
*Attribute alias: RADIUM_228

*Attribute type: Number *Attribute width: 17

*Attribute number of decimals: 2

Attribute:

*Attribute label: RA228_UNIT *Attribute alias: RA228_UNIT

*Attribute type: String *Attribute width: 15

Attribute:

*Attribute label: T_URANIUM *Attribute alias: T_URANIUM

*Attribute type: Number *Attribute width: 17

Attribute width. 17

*Attribute number of decimals: 2

Attribute:

*Attribute label: TU_UNITS *Attribute alias: TU_UNITS

*Attribute type: String
*Attribute width: 15

Attribute:

*Attribute label: M_URANIUM *Attribute alias: M_URANIUM

*Attribute type: Number *Attribute width: 17

*Attribute number of decimals: 2

Attribute:

*Attribute label: MU_UNITS *Attribute alias: MU_UNITS

*Attribute type: String *Attribute width: 15

Overview description:

Dataset overview:

There are 13 sample point locations.

Entity and attribute overview:

```
There are 25 thematics attributes:
```

```
WELL_NO - Number of Well Sampled
WELL_NAME - Name of Well Sampled
CHAPTER - Chapter in which well is located
LAT_DM - Latitude of well in Degree Minutes
LONG_DM - Longitude of well in Degree Minutes
LATITUDE - Latitude of well in Degree Seconds
LONGITUDE - Longitude of well in Degree Seconds
TRS_COORD - Location using Township, Range, Section
FORMATION - Host Formation for water access
   Qal = alluvium
   Kd = Dakota SS
   Kg = Gallup SS
   Kmv = Mesa Verde
   Jmw = Morrison/Westwater
   unk = Unknown
   ? = questioned
WELL_TYPE - Type of well
   Dug
   Drilled
   HP - Hand Pump
   WM - Windmill
TD_FT - Total Depth in Feet
USES - Type of water use
   Livestock - LS
   Domestic - DOM
   Abandoned Community Water System - abd-CWS)
SAMP_DATE - Sample Date
GROSSALPHA - Gross Alpha (U-Nat Ref.) (pCi/L)
GA_UNITS - Units for GROSSALPHA
GROSSBETA - Gross Beta (Sr/Y-90 Ref.) (pCi/L)
GB_UNITS - Units for GROSSBETA
RADIUM_226 - Radium-226 (pCi/L)
RA226_UNIT - Units for RADIUM_226
RADIUM_228 - Radium-228 (pCi/L)
RA228_UNIT - Units for RADIUM_228
T_URANIUM - Total Uranium (pCi/L)
TU_UNITS - Units for T_URANIUM
M_URANIUM - Uranium mass (ug/L)
MU_UNITS - Units for M_URANIUM
Data Value
_____
-999 - No Data or Null Value
-888 - No Test Value
```

Back to Top

Distribution Information:

Distributor:

Contact information:

Contact organization primary:

Contact organization: U. S. Environmental Protection Agency, Region 9,

Superfund Records Center

Contact address:

Address type: mailing address

Address:

95 Hawthorne St (SFD-7C)

City: San Francisco State or province: CA Postal code: 94105 Country: USA

Contact voice telephone: 415-536-2033

Resource description: Downloadable Data

Distribution liability:

Although these data have been processed successfully on a computer system for the USEPA, no warranty expressed or implied is made by the USEPA or its contractors regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. No responsibility is assumed by USEPA or its contractors in the use of these data.

Standard order process:

Digital form:

Digital transfer information:

*Transfer size: 0.000 *Dataset size: 0.000

Custom order process:

Contact the USEPA for a custom order.

Technical prerequisites:

Use of this data generally requires computer workstations with ESRI's Arc/Info (8.x or above), ArcGIS (8.x or above), or ArcView (3.x), or some other GIS or CAD software that is capable of reading or converting this dataset.

Available time period:

Time period information: Single date/time:

Back to Top

Metadata Reference Information:

*Metadata date: 20070807

*Language of metadata: en

Metadata contact:

Contact information:

Contact person primary:

Contact person: Andrew Bain

Contact organization: U. S. Environmental Protection Agency, Region 9,

Superfund Program

Contact position: Project Manager

Contact address:

Address type: mailing and physical address

Address:

75 Hawthorne St (SFD 8-2)

City: San Francisco State or province: CA Postal code: 94105 Country: USA

Contact voice telephone: 415-972-3167

*Metadata standard name: FGDC Content Standards for Digital Geospatial Metadata

*Metadata standard version: FGDC-STD-001-1998

*Metadata time convention: local time

Metadata access constraints: None.

Metadata use constraints:

None.

Metadata security information:

Metadata security classification system: None

Metadata extensions:

*Online linkage: http://www.esri.com/metadata/esriprof80.html

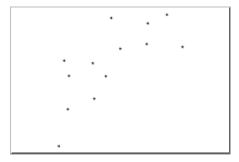
*Profile name: ESRI Metadata Profile

Back to Top

Binary Enclosures:

Thumbnail:

Enclosure type: Picture



Back to Top